

**ABSTRACT OF THE DISCLOSURE**

**MONITORING SYSTEM AND METHOD FOR FLUID DISPENSING SYSTEM**

An apparatus for monitoring an operation of a fluid dispensing gun dispensing a pattern of fluid onto a substrate moving with respect to the dispensing gun. The dispensing gun changes operating states in response to transition signals. A sensor is disposed adjacent the substrate and provides feedback signals in response to detecting edges of the fluid dispensed onto the substrate. A diagnostic monitor is responsive to the transition and feedback signals and automatically measures delays between occurrences of the transition signals and detecting corresponding edges of the fluid deposited onto the substrate resulting from the transition signals. The delays are measured by correlating the feedback signals to the transition signals. A method for measuring the delays is also described and claimed.